

# R&S®HE010 Active Rod Antenna



9 kHz to 80 MHz

Excellent receiving characteristics

## Features

- Wide frequency range
- Optimized for maximum dynamic range
- High sensitivity and excellent large-signal characteristic
- High immunity to lightning strokes in the vicinity
- Short length (1 m)

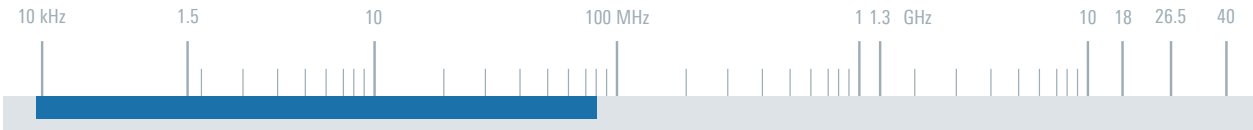
## Brief description

The R&S®HE010 active rod antenna is mainly used for the reception of vertically polarized waves in the frequency range from 9 kHz to 80 MHz.

Additionally, the R&S®HE010 with its low inherent noise can be used as a broadband test antenna.

The excellent characteristics of the active receiving antenna are the result of careful matching of the passive antenna structure to the active circuit. Active antennas are smaller than comparable passive structures and minimally coupled to their environment.

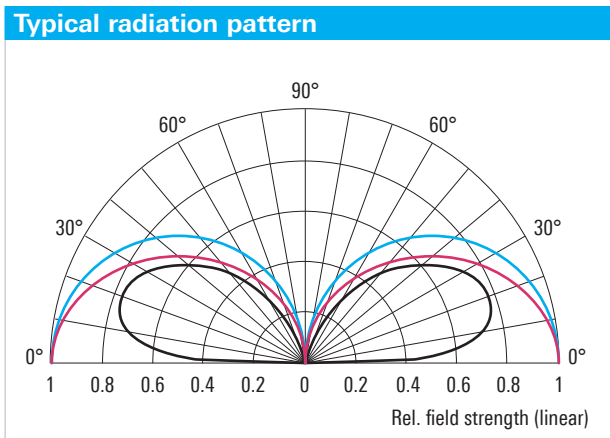




Specifications	
Frequency range	9 kHz to 80 MHz
Polarization	vertical
Input impedance	50 Ω
VSWR	
10 kHz to 50 kHz	<3
50 kHz to 80 MHz	<2
Antenna factor (antenna mounted on conductive plane)	typ. 17 dB/m
IP2	≥50 dBm (typ. 60 dBm)
IP3	≥30 dBm

Crossmodulation limit	12 V/m (up to 30 MHz), 6 V/m (30 MHz to 80 MHz)
Power supply	21 V to 26 V DC (max. 170 mA)
Connector	N female
MTBF	>250 000 h
Operating temperature range	-40°C to +65°C
Max. wind speed	188 km/h (without ice deposit)
Dimensions	
Length x diameter (max.)	approx. 1 m x 120 mm (approx. 39.4 in x 4.7 in)
Weight	approx. 0.9 kg (approx. 2 lb)

Ordering information	Type	Order No.
Active Rod Antenna	R&S®HE010	0523.1414.13
<b>Recommended extras</b>		
Power Supply Unit	R&S®IN115	4004.1707.02



Blue curve: on perfectly conducting and infinitely large plane at 10 kHz; red curve: on perfectly conducting and infinitely large plane at 80 MHz; black curve: on moderately conducting plane.

Typical inherent noise compared with different standard noise environments

